

09/994,519 04/11/02

Please type a plus sign (+) inside this box → +

PTO/SB/21 (08-00)

Approval for use through 10/31/2002. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



## TRANSMITTAL FORM

to be used for all correspondence after initial filing)

<b>TRANSMITTAL FORM</b>		<b>Application Number</b>	09/994,519
		<b>Filing Date</b>	November 26, 2001
		<b>First Named Inventor</b>	Crawford, et al.
		<b>Group Art Unit</b>	2681
		<b>Examiner Name</b>	TBD
<b>Total Number of Pages in This Submission</b>	23	<b>Attorney Docket Number</b>	70629

### ENCLOSURES (check all that apply)

<input checked="" type="checkbox"/> Fee Transmittal Form (in duplicate)	<input type="checkbox"/> Assignment Papers (for an Application)	<input type="checkbox"/> After Allowance Communication to Group
<input type="checkbox"/> Fee Attached	<input checked="" type="checkbox"/> Drawing(s)	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Amendment / Reply	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> After Final	<input checked="" type="checkbox"/> Petition	<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Affidavits/declaration(s)	<input type="checkbox"/> Petition to Convert to a Provisional Application	<input type="checkbox"/> Status Letter
<input type="checkbox"/> Extension of Time Request	<input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address	<input type="checkbox"/> Other Enclosure(s) (please identify below):
<input type="checkbox"/> Express Abandonment Request	<input type="checkbox"/> Terminal Disclaimer	
<input type="checkbox"/> Information Disclosure Statement	<input type="checkbox"/> Request for Refund	
<input type="checkbox"/> Certified Copy of Priority Document(s)	<input type="checkbox"/> CD, Number of CD(s) _____	
<input type="checkbox"/> Response to Missing Parts/Incomplete Application	<b>Remarks</b>	
<input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53		

### SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

<b>Individual name</b>	Scott J. Menghini, Reg. No. 42,880
<b>Signature</b>	
<b>Date</b>	April 2, 2002

### CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Box PGPUB Drawings, Commissioner for Patents, Washington, D.C. 20231, on <b>April 2, 2002</b> this date:			
<b>Typed or printed name</b>	Scott J. Menghini		
<b>Signature</b>		<b>Date</b>	April 2, 2002

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Approved for use through 10/31/2002, OMB 0651-0032  
U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

<b>FEE TRANSMITTAL</b> <b>for FY 2002</b> Patent fees are subject to annual revision.	<b>Complete If Known</b>	
	Application Number	09/994,519
	Filing Date	11/26/01
	First Named Inventor	Crawford, et al.
	Examiner Name	TBD
	Group Art Unit	2681
TOTAL AMOUNT OF PAYMENT (\$)		130.00
Attorney Docket No.		70629

<b>METHOD OF PAYMENT</b>				<b>FEE CALCULATION (continued)</b>																																																																																																																																																																																													
1. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge Indicated fees and credit any overpayment to: Deposit Account Number: 06-1135 Deposit Account Name: Fitch, Even, Tabin & Flannery <input checked="" type="checkbox"/> Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17 <input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27				3. <b>ADDITIONAL FEES</b> <table border="1"> <thead> <tr> <th>Fee Code</th> <th>Large Entity Fee (\$)</th> <th>Small Entity Fee Code</th> <th>Small Entity Fee (\$)</th> <th>Fee Description</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr><td>105</td><td>130</td><td>205</td><td>65</td><td>Surcharge - late filing fee or oath</td><td></td></tr> <tr><td>127</td><td>50</td><td>227</td><td>25</td><td>Surcharge - late provisional filing fee or cover sheet</td><td></td></tr> <tr><td>139</td><td>130</td><td>139</td><td>130</td><td>Non-English specification</td><td></td></tr> <tr><td>147</td><td>2,520</td><td>147</td><td>2,520</td><td>For filing a request for ex parte reexamination</td><td></td></tr> <tr><td>112</td><td>920*</td><td>112</td><td>920*</td><td>Requesting publication of SIR prior to Examiner action</td><td></td></tr> <tr><td>113</td><td>1,840*</td><td>113</td><td>1,840*</td><td>Requesting publication of SIR after Examiner action</td><td></td></tr> <tr><td>115</td><td>110</td><td>215</td><td>55</td><td>Extension for reply within first month</td><td></td></tr> <tr><td>116</td><td>400</td><td>216</td><td>200</td><td>Extension for reply within second month</td><td></td></tr> <tr><td>117</td><td>920</td><td>217</td><td>460</td><td>Extension for reply within third month</td><td></td></tr> <tr><td>118</td><td>1,440</td><td>218</td><td>720</td><td>Extension for reply within fourth month</td><td></td></tr> <tr><td>128</td><td>1,960</td><td>228</td><td>980</td><td>Extension for reply within fifth month</td><td></td></tr> <tr><td>119</td><td>320</td><td>219</td><td>160</td><td>Notice of Appeal</td><td></td></tr> <tr><td>120</td><td>320</td><td>220</td><td>160</td><td>Filing a brief in support of an appeal</td><td></td></tr> <tr><td>121</td><td>280</td><td>221</td><td>140</td><td>Request for oral hearing</td><td></td></tr> <tr><td>138</td><td>1,510</td><td>138</td><td>1,510</td><td>Petition to Institute a public use proceeding</td><td></td></tr> <tr><td>140</td><td>110</td><td>240</td><td>55</td><td>Petition to revive - unavoidable</td><td></td></tr> <tr><td>141</td><td>1,280</td><td>241</td><td>640</td><td>Petition to revive - unintentional</td><td></td></tr> <tr><td>142</td><td>1,280</td><td>242</td><td>640</td><td>Utility Issue fee (or reissue)</td><td></td></tr> <tr><td>143</td><td>460</td><td>243</td><td>230</td><td>Design Issue fee</td><td></td></tr> <tr><td>144</td><td>620</td><td>244</td><td>310</td><td>Plant Issue fee</td><td></td></tr> <tr><td>122</td><td>130</td><td>122</td><td>130</td><td>Petitions to the Commissioner</td><td>130.00</td></tr> <tr><td>123</td><td>50</td><td>123</td><td>50</td><td>Processing fee under 37 CFR 1.17(q)</td><td></td></tr> <tr><td>126</td><td>180</td><td>126</td><td>180</td><td>Submission of Information Disclosure Stmt</td><td></td></tr> <tr><td>581</td><td>40</td><td>581</td><td>40</td><td>Recording each patent assignment per property (times number of properties)</td><td></td></tr> <tr><td>146</td><td>740</td><td>246</td><td>370</td><td>Filing a submission after final rejection (37 CFR § 1.129(a))</td><td></td></tr> <tr><td>149</td><td>740</td><td>249</td><td>370</td><td>For each additional invention to be examined (37 CFR § 1.129(b))</td><td></td></tr> <tr><td>179</td><td>740</td><td>279</td><td>370</td><td>Request for Continued Examination (RCE)</td><td></td></tr> <tr><td>169</td><td>900</td><td>169</td><td>900</td><td>Request for expedited examination of a design application</td><td></td></tr> <tr><td colspan="5">Other fee (specify) _____</td><td></td></tr> <tr><td colspan="5"><b>SUBTOTAL (3)</b></td><td><b>(\$)</b> 130.00</td></tr> </tbody> </table>				Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description	Fee Paid	105	130	205	65	Surcharge - late filing fee or oath		127	50	227	25	Surcharge - late provisional filing fee or cover sheet		139	130	139	130	Non-English specification		147	2,520	147	2,520	For filing a request for ex parte reexamination		112	920*	112	920*	Requesting publication of SIR prior to Examiner action		113	1,840*	113	1,840*	Requesting publication of SIR after Examiner action		115	110	215	55	Extension for reply within first month		116	400	216	200	Extension for reply within second month		117	920	217	460	Extension for reply within third month		118	1,440	218	720	Extension for reply within fourth month		128	1,960	228	980	Extension for reply within fifth month		119	320	219	160	Notice of Appeal		120	320	220	160	Filing a brief in support of an appeal		121	280	221	140	Request for oral hearing		138	1,510	138	1,510	Petition to Institute a public use proceeding		140	110	240	55	Petition to revive - unavoidable		141	1,280	241	640	Petition to revive - unintentional		142	1,280	242	640	Utility Issue fee (or reissue)		143	460	243	230	Design Issue fee		144	620	244	310	Plant Issue fee		122	130	122	130	Petitions to the Commissioner	130.00	123	50	123	50	Processing fee under 37 CFR 1.17(q)		126	180	126	180	Submission of Information Disclosure Stmt		581	40	581	40	Recording each patent assignment per property (times number of properties)		146	740	246	370	Filing a submission after final rejection (37 CFR § 1.129(a))		149	740	249	370	For each additional invention to be examined (37 CFR § 1.129(b))		179	740	279	370	Request for Continued Examination (RCE)		169	900	169	900	Request for expedited examination of a design application		Other fee (specify) _____						<b>SUBTOTAL (3)</b>					<b>(\$)</b> 130.00
Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description	Fee Paid																																																																																																																																																																																												
105	130	205	65	Surcharge - late filing fee or oath																																																																																																																																																																																													
127	50	227	25	Surcharge - late provisional filing fee or cover sheet																																																																																																																																																																																													
139	130	139	130	Non-English specification																																																																																																																																																																																													
147	2,520	147	2,520	For filing a request for ex parte reexamination																																																																																																																																																																																													
112	920*	112	920*	Requesting publication of SIR prior to Examiner action																																																																																																																																																																																													
113	1,840*	113	1,840*	Requesting publication of SIR after Examiner action																																																																																																																																																																																													
115	110	215	55	Extension for reply within first month																																																																																																																																																																																													
116	400	216	200	Extension for reply within second month																																																																																																																																																																																													
117	920	217	460	Extension for reply within third month																																																																																																																																																																																													
118	1,440	218	720	Extension for reply within fourth month																																																																																																																																																																																													
128	1,960	228	980	Extension for reply within fifth month																																																																																																																																																																																													
119	320	219	160	Notice of Appeal																																																																																																																																																																																													
120	320	220	160	Filing a brief in support of an appeal																																																																																																																																																																																													
121	280	221	140	Request for oral hearing																																																																																																																																																																																													
138	1,510	138	1,510	Petition to Institute a public use proceeding																																																																																																																																																																																													
140	110	240	55	Petition to revive - unavoidable																																																																																																																																																																																													
141	1,280	241	640	Petition to revive - unintentional																																																																																																																																																																																													
142	1,280	242	640	Utility Issue fee (or reissue)																																																																																																																																																																																													
143	460	243	230	Design Issue fee																																																																																																																																																																																													
144	620	244	310	Plant Issue fee																																																																																																																																																																																													
122	130	122	130	Petitions to the Commissioner	130.00																																																																																																																																																																																												
123	50	123	50	Processing fee under 37 CFR 1.17(q)																																																																																																																																																																																													
126	180	126	180	Submission of Information Disclosure Stmt																																																																																																																																																																																													
581	40	581	40	Recording each patent assignment per property (times number of properties)																																																																																																																																																																																													
146	740	246	370	Filing a submission after final rejection (37 CFR § 1.129(a))																																																																																																																																																																																													
149	740	249	370	For each additional invention to be examined (37 CFR § 1.129(b))																																																																																																																																																																																													
179	740	279	370	Request for Continued Examination (RCE)																																																																																																																																																																																													
169	900	169	900	Request for expedited examination of a design application																																																																																																																																																																																													
Other fee (specify) _____																																																																																																																																																																																																	
<b>SUBTOTAL (3)</b>					<b>(\$)</b> 130.00																																																																																																																																																																																												
2. <b>PAYMENT ENCLOSED:</b> <input type="checkbox"/> Check <input type="checkbox"/> Credit card <input type="checkbox"/> Money Order <input type="checkbox"/> Other																																																																																																																																																																																																	
<b>FEE CALCULATION</b>																																																																																																																																																																																																	
1. <b>BASIC FILING FEE</b> <table border="1"> <thead> <tr> <th>Large Entity Fee Code</th> <th>Large Entity Fee (\$)</th> <th>Small Entity Fee Code</th> <th>Small Entity Fee (\$)</th> <th>Fee Description</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr><td>101</td><td>740</td><td>201</td><td>370</td><td>Utility filing fee</td><td></td></tr> <tr><td>106</td><td>330</td><td>206</td><td>165</td><td>Design filing fee</td><td></td></tr> <tr><td>107</td><td>510</td><td>207</td><td>255</td><td>Plant filing fee</td><td></td></tr> <tr><td>108</td><td>740</td><td>208</td><td>370</td><td>Reissue filing fee</td><td></td></tr> <tr><td>114</td><td>160</td><td>214</td><td>80</td><td>Provisional filing fee</td><td></td></tr> <tr><td colspan="5"><b>SUBTOTAL (1)</b></td><td><b>(\$)</b></td></tr> </tbody> </table>				Large Entity Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description	Fee Paid	101	740	201	370	Utility filing fee		106	330	206	165	Design filing fee		107	510	207	255	Plant filing fee		108	740	208	370	Reissue filing fee		114	160	214	80	Provisional filing fee		<b>SUBTOTAL (1)</b>					<b>(\$)</b>																																																																																																																																																				
Large Entity Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description	Fee Paid																																																																																																																																																																																												
101	740	201	370	Utility filing fee																																																																																																																																																																																													
106	330	206	165	Design filing fee																																																																																																																																																																																													
107	510	207	255	Plant filing fee																																																																																																																																																																																													
108	740	208	370	Reissue filing fee																																																																																																																																																																																													
114	160	214	80	Provisional filing fee																																																																																																																																																																																													
<b>SUBTOTAL (1)</b>					<b>(\$)</b>																																																																																																																																																																																												
2. <b>EXTRA CLAIM FEES</b> <table border="1"> <thead> <tr> <th>Total Claims</th> <th>Extra Claims</th> <th>Fee from below</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr><td>-20**=</td><td></td><td>X</td><td></td></tr> <tr><td>-3**=</td><td></td><td>X</td><td></td></tr> <tr><td>Multiple Dependent</td><td></td><td></td><td></td></tr> </tbody> </table> <table border="1"> <thead> <tr> <th>Large Entity Fee Code</th> <th>Large Entity Fee (\$)</th> <th>Small Entity Fee Code</th> <th>Small Entity Fee (\$)</th> <th>Fee Description</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr><td>103</td><td>18</td><td>203</td><td>9</td><td>Claims in excess of 20</td><td></td></tr> <tr><td>102</td><td>84</td><td>202</td><td>42</td><td>Independent claims in excess of 3</td><td></td></tr> <tr><td>104</td><td>280</td><td>204</td><td>140</td><td>Multiple dependent claim, if not paid</td><td></td></tr> <tr><td>109</td><td>84</td><td>209</td><td>42</td><td>**Reissue independent claims over original patent</td><td></td></tr> <tr><td>110</td><td>18</td><td>210</td><td>9</td><td>** Reissue claims in excess of 20 end over original patent</td><td></td></tr> <tr><td colspan="5"><b>SUBTOTAL (2)</b></td><td><b>(\$)</b></td></tr> </tbody> </table>				Total Claims	Extra Claims	Fee from below	Fee Paid	-20**=		X		-3**=		X		Multiple Dependent				Large Entity Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description	Fee Paid	103	18	203	9	Claims in excess of 20		102	84	202	42	Independent claims in excess of 3		104	280	204	140	Multiple dependent claim, if not paid		109	84	209	42	**Reissue independent claims over original patent		110	18	210	9	** Reissue claims in excess of 20 end over original patent		<b>SUBTOTAL (2)</b>					<b>(\$)</b>																																																																																																																																				
Total Claims	Extra Claims	Fee from below	Fee Paid																																																																																																																																																																																														
-20**=		X																																																																																																																																																																																															
-3**=		X																																																																																																																																																																																															
Multiple Dependent																																																																																																																																																																																																	
Large Entity Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description	Fee Paid																																																																																																																																																																																												
103	18	203	9	Claims in excess of 20																																																																																																																																																																																													
102	84	202	42	Independent claims in excess of 3																																																																																																																																																																																													
104	280	204	140	Multiple dependent claim, if not paid																																																																																																																																																																																													
109	84	209	42	**Reissue independent claims over original patent																																																																																																																																																																																													
110	18	210	9	** Reissue claims in excess of 20 end over original patent																																																																																																																																																																																													
<b>SUBTOTAL (2)</b>					<b>(\$)</b>																																																																																																																																																																																												

\*\*or number previously paid, if greater; For Reissues, see above

\*Reduced by Basic Filing Fee Paid

<b>SUBMITTED BY</b>		<b>Complete (if applicable)</b>	
Name (Print/Type)	Scott J. Menghini	Registration No. (Attorney/Agent)	42,880
Signature	<i>Scott J. Menghini</i>	Telephone	858-552-1311
		Date	April 2, 2002

**WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization of PTO-2038.**

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



Attorney Docket No. 70629

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant(s): Crawford, et al.  
 Serial No.: 09/994,519  
 Filed: November 26, 2001  
 For: **METHOD FOR ESTIMATING CARRIER-TO-  
 NOISE-PLUS-INTERFERENCE RATIO (CNIR)  
 FOR OFDM WAVEFORMS AND THE USE  
 THEREOF FOR DIVERSITY ANTENNA  
 BRANCH SELECTION**  
 Group Art Unit: 2681  
 Examiner: TBD

) I hereby certify that this paper is being  
 ) deposited with the United States Postal Service  
 ) as First Class Mail in an envelope addressed  
 ) to:  
 ) Box PGPUB Drawings  
 ) Commissioner for Patents  
 ) Washington, D.C. 20231  
 ) on this date.

) 04/02/02  
 ) Date

) *Scott J. Menghini*  
 ) Scott J. Menghini  
 ) Registration No. 42,880  
 ) Attorney for Applicant(s)

**PETITION UNDER 37 C.F.R. § 1.182  
 REQUESTING ENTRY OF DRAWINGS IN A  
 PATENT APPLICATION PUBLICATION**

BOX PGPUB DRAWINGS  
 Commissioner for Patents  
 Washington, D.C. 20231

Dear Sir:

Applicant hereby petitions and requests that the enclosed formal drawings be entered and included in the patent application publication for the above-identified patent application.

The Commissioner is hereby authorized to charge the Petition Fee of \$130.00 as set forth in 37 C.F.R. § 1.17(h) as provided in the attached Fee Transmittal Form.

Respectfully submitted,

*Scott J. Menghini*  
 Scott J. Menghini  
 Reg. No. 42,880  
 April 2, 2002

04/11/2002 NGBREMI 00000097 061135 09994519

01 FC:632 130.00 CH

Address all correspondence to:  
 FITCH, EVEN, TABIN & FLANNERY  
 Suite 1600  
 120 S. La Salle Street  
 Chicago, IL 60603  
 (858) 552-1311